laboratory described in §159.010, one of the following:

- (1) Satisfactory test results on a PFD of sufficiently similar design as determined by the Commandant.
- (2) Engineering analysis demonstrating that the test for which a waiver is requested is not appropriate for the particular design submitted for approval or that, because of its design or construction, it is not possible for the PFD to fail that test.

[CGD 95-028, 62 FR 51209, Sept. 30, 1997]

§ 160.001-5 Production oversight.

- (a) General. Production tests and inspections must be conducted in accordance with this section, subpart 159.007 of this chapter, and if conducted by an independent laboratory, the independent laboratory's procedures for production inspections and tests as accepted by the Commandant. The Commandant may prescribe additional production tests and inspections necessary to maintain quality control and to monitor compliance with the requirements of this subchapter.
- (b) Oversight. In addition to responsibilities set out in part 159 of this chapter and the accepted laboratory procedures for production inspections and tests, each manufacturer of a life preserver and each laboratory inspector shall comply with the following, as applicable:
- (1) Manufacturer. Each manufacturer must—
- (i) Perform all tests and examinations necessary to show compliance with this subpart and subpart under which the life preserver is approved on each lot before any inspector's tests and inspection of the lot;
- (ii) Follow established procedures for maintaining quality control of the materials used, manufacturing operations, and the finished product; and
- (iii) Allow an inspector to take samples of completed units or of component materials for tests required by this subpart and for tests relating to the safety of the design.
- (2) Laboratory. An inspector from the accepted laboratory shall oversee production in accordance with the laboratory's procedures for production inspections and tests accepted by the Commandant. During production over-

sight, the inspector shall not perform or supervise any production test or inspection unless—

- (i) The manufacturer has a valid approval certificate; and
- (ii) The inspector has first observed the manufacturer's production methods and any revisions to those meth-
- (3) At least quarterly, the inspector shall check the manufacturer's compliance with the company's quality control procedures, examine the manufacturer's required records, and observe the manufacturer perform each of the required production tests.
- (c) Test facilities. The manufacturer shall provide a suitable place and apparatus for conducting the tests and inspections necessary to determine compliance of life preservers with this subpart. The manufacturer shall provide means to secure any test that is not continuously observed, such as the 48 hour buoyancy test. The manufacturer must have the calibration of all test equipment checked in accordance with the test equipment manufacturer's recommendation and interval but not less than at least once every year.
- (d) Lots. A lot may not consist of more than 1000 life preservers. A lot number must be assigned to each group of life preservers produced. Lots must be numbered serially. A new lot must be started whenever any change in materials or a revision to a production method is made, and whenever any substantial discontinuity in the production process occurs. The lot number assigned, along with the approval number, must enable the PFD manufacturer to determine the supplier's identifying information for the component lot.
- (e) Samples. (1) From each lot of life preservers, manufacturers shall randomly select a number of samples from completed units at least equal to the applicable number required by table 160.001–5(e) for buoyancy testing. Additional samples must be selected for any tests, examinations, and inspections required by the laboratory's production inspections and tests procedures.

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TABLE 160.001–5(E)—SAMPLING FOR BUOYANCY TESTS

Number of life pre- servers in sample
1
2
3
4
6
8

- (2) For a lot next succeeding one from which any sample life preserver failed the buoyancy test, the sample shall consist of not less than ten specimen life preservers to be tested for buoyancy in accordance with paragraph (f) of this section.
- (f) Buoyancy test. The buoyancy of the life preservers must be determined by measuring the upward force exerted by the individual submerged unit. The buoyancy measurement must be made at the end of the 24 or 48 hours of submersion, as specified in the applicable approval subpart, during which period the pad inserts must not be disturbed.
- (g) Buoyancy required. The buoyancy must meet the requirements of the applicable approval subpart.
- (h) Lot inspection. On each lot, the laboratory inspector shall perform a final lot inspection to be satisfied that the life preservers meet this subpart. Each lot must demonstrate—
 - (1) First quality workmanship;
- (2) That the general arrangement and attachment of all components, such as body straps, closures, tie tapes, and drawstrings, are as specified in the approved plans and specifications;
- (3) Compliance with the marking requirements in the applicable approval subpart; and
- (4) The information pamphlet specified in 33 CFR part 181 subpart G, if required, is securely attached to the device, with the PFD selection information visible and accessible prior to purchase.
- (i) Lot acceptance. When the independent laboratory has determined that the life preservers in the lot are of a type officially approved in the name of the company, and that such life preservers meet the requirements of this subpart, they shall be plainly marked

in waterproof ink with the independent laboratory's name or identifying mark.

(j) Lot rejection. Each nonconforming unit must be rejected. If three or more nonconforming units are rejected for the same kind of defect, lot inspection must be discontinued and the lot rejected. The inspector must discontinue lot inspection and reject the lot if examination of individual units or the records for the lot shows noncompliance with either this subchapter or the laboratory's or the manufacturer's quality control procedures. A rejected unit or lot may be resubmitted for testing and inspection if the manufacturer first removes and destroys each defective unit or, if authorized by the laboratory, reworks the unit or lot to correct the defect. A rejected lot or rejected unit may not be sold or offered for sale under the representation that it meets this subpart or that it is Coast Guard-approved.

[CGD 95-028, 62 FR 51210, Sept. 30, 1997]

Subpart 160.002—Life Preservers, Kapok, Adult and Child (Jacket Type), Models 3 and 5

§160.002-1 Incorporation by reference.

- (a) *Specifications and standards.* This subpart makes reference to the following documents:
 - (1) Military Specifications:
- MIL-W-530—Webbing, Textile, Cotton. General Purpose, Natural or in Colors.
 - (2) Federal Specification:
- L-P-375—Plastic Film, Flexible, Vinyl Chloride.
 - (3) Federal Standards:

No. 191—Textile Test Methods. No. 751A—Stitches, Seams, and Stitchings.

- (4) Coast Guard specifications:
- 164.003-Kapok, Processed.
- (b) *Plans*. The following plans, of the issue in effect on the date life preservers are manufactured, form a part of this specification:

Dwg. No. F-49-6-1:

(Sheet 1) Cutting Pattern and General Arrangement (adult).

(Sheet 1A) Alternate stitching of tapes and webbing (adult and child).

(Sheet 2) Pad Detail (adult). Dwg. No. F-49-6-5:

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